Proposed changes to Power Supply Monitor Displays

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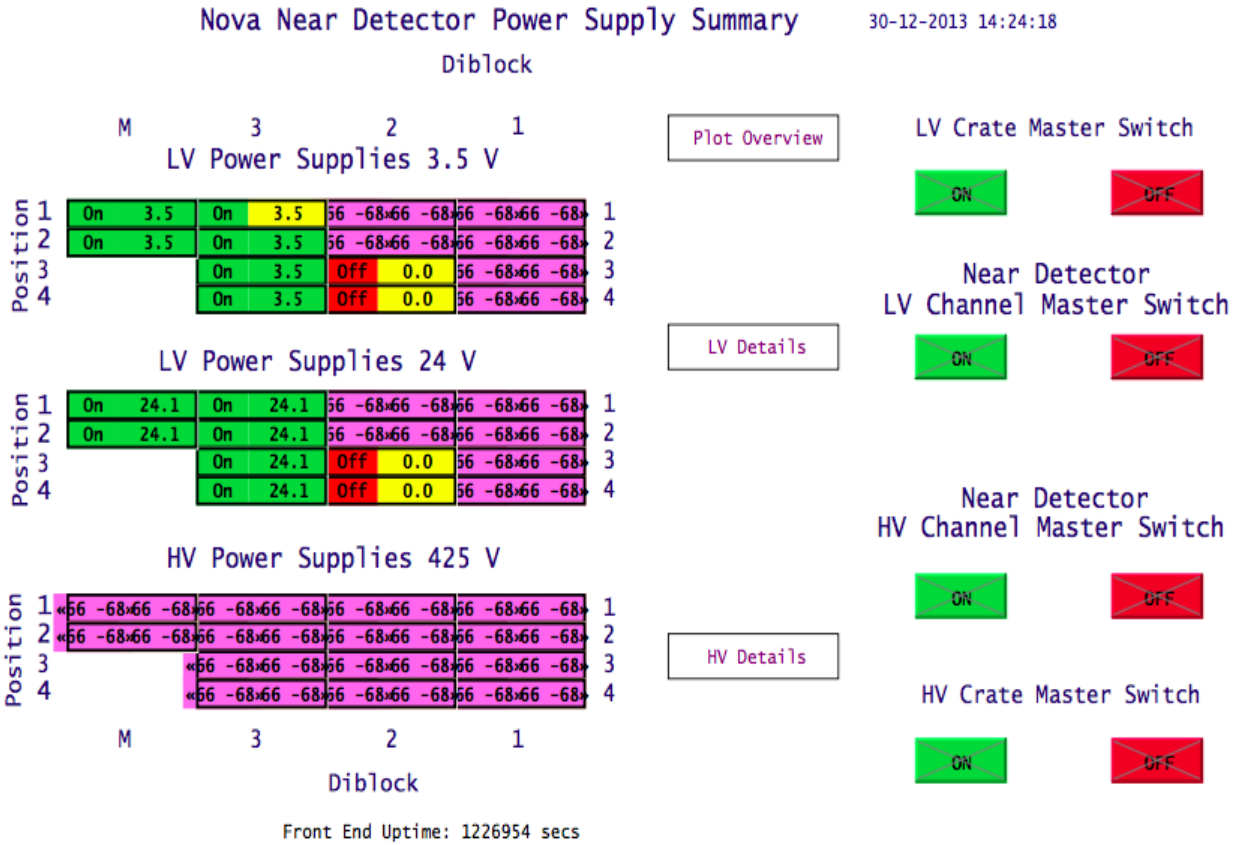
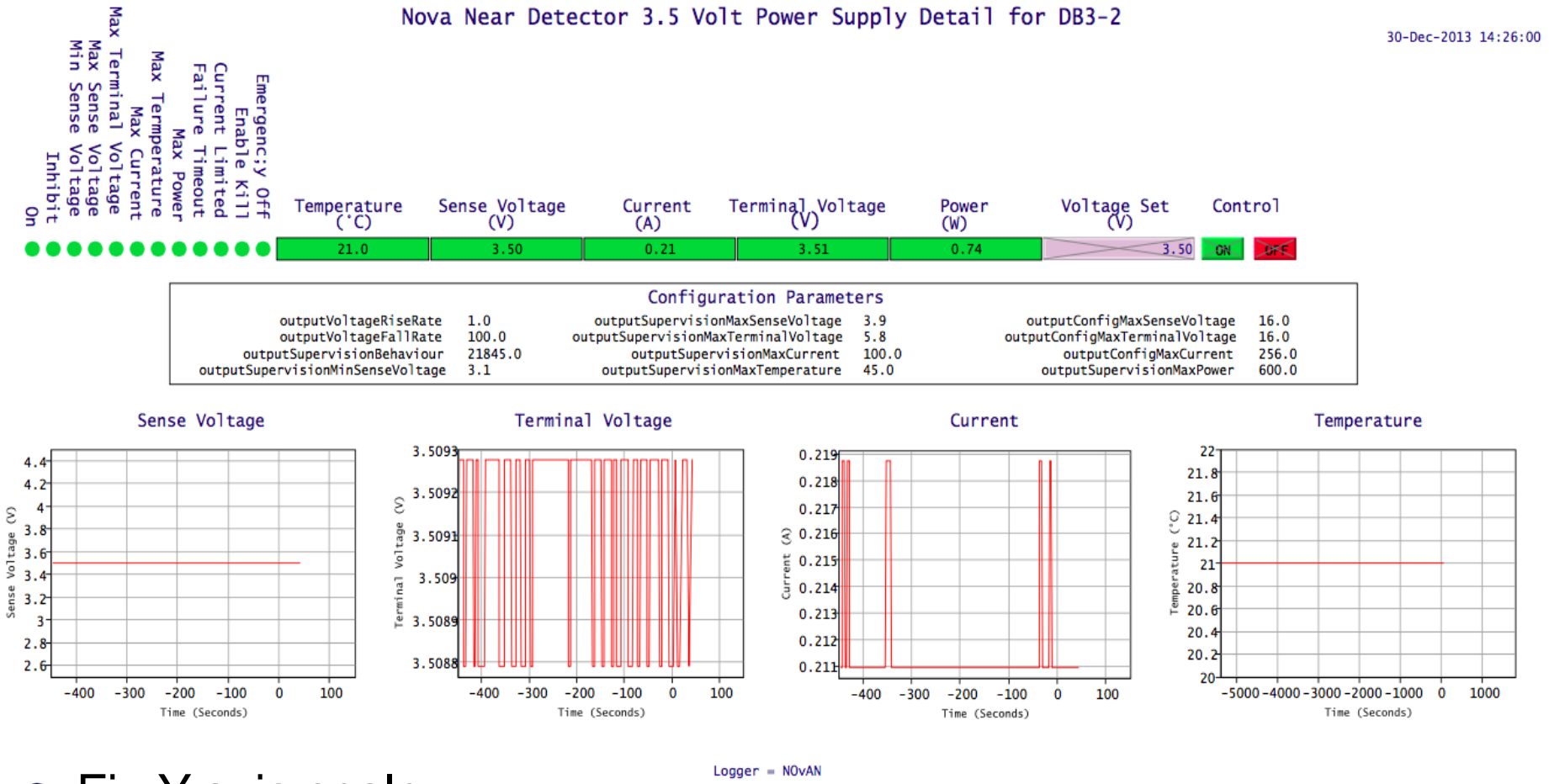
DCS Meeting

Proposed Changes to PS Displays

- Add additional layer of safety for Master Switches
  - Will do on my next trip to FNAL.
- Change lower threshold for PS Temperature ALARM based on Data Logger plots.
  - Current Limits: Lower limit = 20C; Upper limit = 45C
- Displaying the number of ALARMS from the Lower Branches.
  - No separate ACNET device for Warnings.
- Current ALARMS Limits:
  - Channel 3.5V : MC = (0, 45)A, base = 34A
    SV = (3.4, 3.9)V, base 3.5V,
    MV = (3.4, 5.8)V, base = 3.5V
    TP = (20, 45)C, base 30C
  - Limits in the .csv file and shown in the display differ.
    outputSupervisionMaxCurrent =100A.
  - Question: What happens when one of the variables drops beyond the lower limit ?
    Question: What are the hardware upper limits that would shut off the channel ?

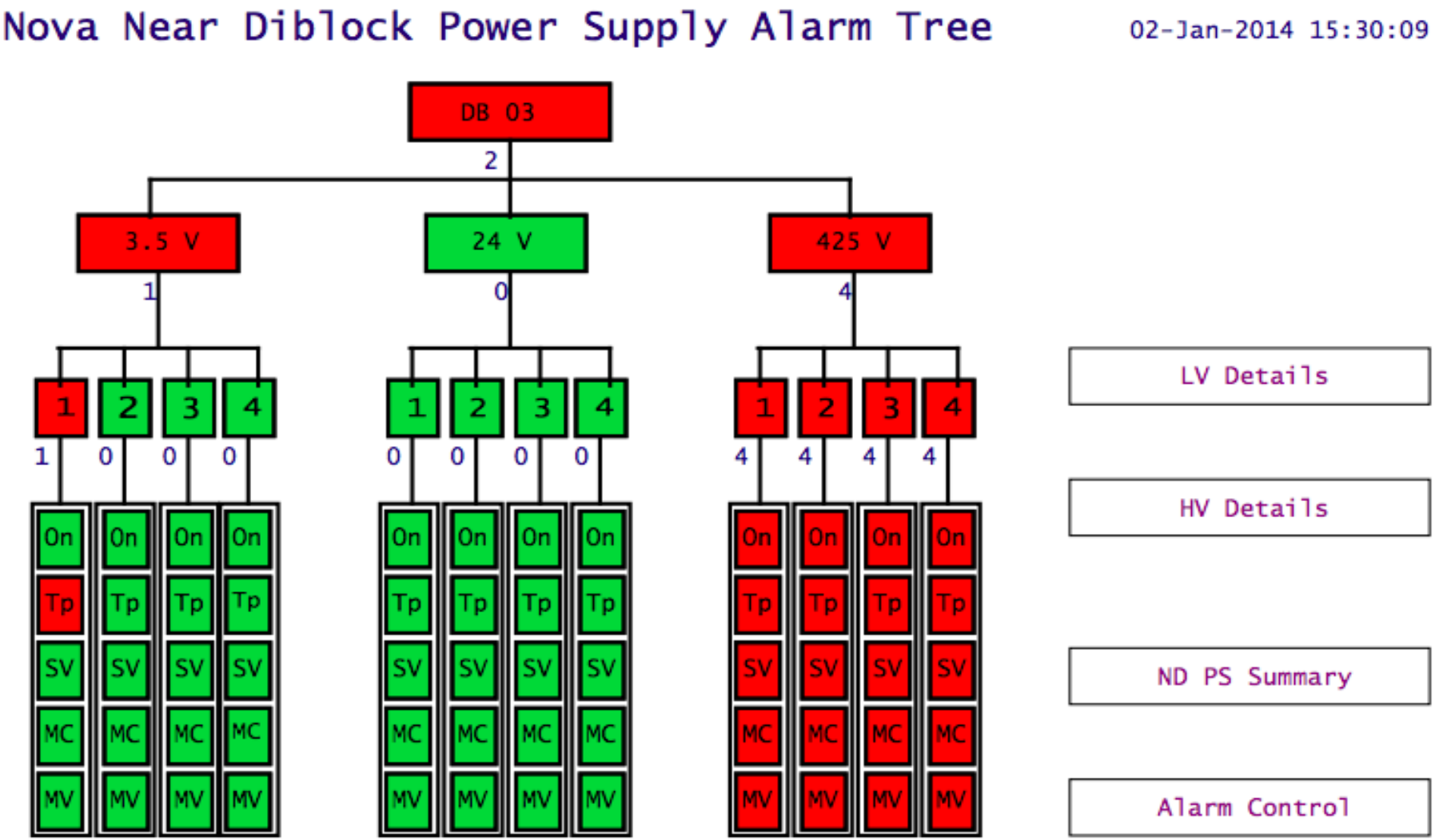

Nova Near Detector Power Supply Summary
30-12-2013 14:24:18
Diblock
M 3 2 1
LV Power Supplies 3.5 V
Position
On 3.5
Off 0.0
LV Power Supplies 24 V
On 24.1
HV Power Supplies 425 V
Diblock
Front End Uptime: 1226954 secs
Plot Overview
LV Details
HV Details
LV Crate Master Switch
ON
OFF
Near Detector
LV Channel Master Switch
Near Detector
HV Channel Master Switch
HV Crate Master Switch

Single Channel View



- Fix Y-axis scale.
  - Reasonable for LV (3.5V and 24V)
  - Not Reasonable for 425V ? The 0 mark MUST be visible. If scaled from -1 to 500V, small fluctuations will NOT be visible.

PS Diblock Alarm Tree



Summary of Proposed Changes for PS Displays

- Add additional safety layer for Master switches to PS displays.
- Fix Y-axis scale for 3.5V and 24V in single channel view. (425V ?)
- Change lower threshold for PS Temperature ALARM based on Data Logger plots.
- Displaying the number of ALARMS from the Lower Branches in the ALARM Summary Display.
- Ask for a limited access to the ACNET system to be able to change ALARM thresholds.